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The time period for reply, if any, is set in the attached communication.

Application/Control Number: 10/663,378 Page 2

Art Unit: 2616

Office Action.

Continuation Sheet (PTO-303)

1. On Cursory consideration the request for consideration, will be entered upon appeal, and further the request for reconsideration does not overcome the art rejections presented in the Final

Response to Arguments

- 2. Applicant's arguments filed on 02/14/2008 have been fully considered but they are not persuasive.
- 3. Applicant argues with respect to independent claims 1, 19, 31, and 37 that the primary reference, Klassen, fails to teach the limitation that requires transmitting test packets at a lower priority level than data packets. In the Remarks, in the last paragraph of page 7, the Applicant attempts to support the above stated argument by indicating none of the passages cited by the Examiner from the primary reference teach the limitation in question. Specifically, Applicant questions Examiner's interpretation of Klassen Column 7:18-27 as teaching the limitation in question. Applicant says Klassen Column 7:18-27 only teaches sending test packets at different priority levels for different types of test packets and does not disclose sending test packets at a priority level that is lower than that of data packets transmitted between endpoints. Applicant further states without providing any support that Klassen teaches each category of test packet is sent at the same priority level as the data packets corresponding to that type of test packet.

Application/Control Number: 10/663,378 Page 3

Art Unit: 2616

Examiner respectfully disagrees with Applicant's conclusions. It is clearly established that Klassen teaches that test packets have different priority levels and Applicant readily agrees with Examiner's position as indicated in lines 4-6 of the last paragraph on page 7 of the Remarks. However it is clear from the drawing of Figure 1 that the test packets are sent between endpoints across a live communication network 20. Examiner previously cited Klassen columns 4:55-65 and 5:1-8 to show that the test packets are sent across a live communication network where different types of data traffic with different type of priorities are transmitted between endpoints. This is further supported by Klassen in Column 15:37-45. Klassen in Column 7:18-27 clearly shows the test packets have some priority against other unspecified packets, i.e. data packets, in the live communication network. The priority of the test packets has to be set with respect to the other data packets and Klassen's teaching clearly supports that in Column 7:20-21 as it shows test packets are sent at a lower priority. Of course the lower priority is compared to other unspecified packets, i.e. data packets in the live communication network. Hence, it is still the position of the Examiner that Klassen indeed teaches the limitation that requires transmitting test packets at a lower priority level than data packets. However, Klassen also teaches transmitting test packets at a higher priority level than data packets as indicated in Column 7:21-22.

4. Applicant argues that Klassen fails to disclose "evaluating which of the plurality of different time slots corresponds to favorable network traffic conditions" as recited in independent claims 1, 19, and 31, nor does it disclose "empirically determining which of the plurality of time slots is associated with a reduced level of packet contention" as recited in independent claim 15 or "identifying one or more time slots that correspond to a low level of contention conditions" as recited in independent claim 37. Applicant refutes Examiner's citing of Klassen Col. 17:50-52.

Examiner respectfully disagrees. Examiner wants to emphasize that time slot is simply a time interval and Klassen in Column 17:50-52 shows selection of a time interval called best network time= modem time for transaction + L (latency measured in millisecond), and the repeated iteration to determine the time slot or time interval is shown in steps 1 to 6 in Klassen Column 17. Klassen's Column 17:50 correspond to 0% queue and is certainly a condition for low level of contention condition.

5. Applicant argues that neither Klassen nor Barton discloses the feature recited in independent claims 1, 19, 31, and 37 of transmitting data packets using one or more favorable time slots evaluated in a previous step, nor the feature recited in independent claim 15 of transmitting data packets during one or more time slots empirically determined to be associated with a reduced level of packet contention.

Examiner respectfully disagrees. The primary reference, Klassen, has already taught the step of selecting the favorable time slots using <u>a repeated iteration</u> to evaluate the best time interval or time slot also known as best network time = modem time for transaction + L (latency measured in millisecond) as illustrated by Klassen in Column 17 in steps 1-7.

Examiner clearly indicated that the secondary reference, Barton, teaches transmitting a plurality of data packets over the network during a plurality of favorable time slots. Note that the method for selecting the favorable time slots is already taught by the primary reference. Barton prior to transmitting a plurality of data packets over the network schedules the packets for transmission during specified times (i.e. plurality of favorable time slots). It appears as though Applicant did not see the relevance of Barton's Figures 5 and 6 and Barton's paragraphs 23, 76, and 86. But Applicant agrees in the Remarks that Barton merely relates to allocating packets to

Art Unit: 2616

be transmitted at specified times (paragraph 23) based on a reserved allocation scheme (paragraphs 90 to 96). Barton in paragraph 86 shows or suggests how the specific time slots are selected tying it to Klassen's method of selecting best network time interval or time slot.

6. Applicant in the Remarks, in the last paragraph of page 9, argues that Klassen and Barton cannot be combined because Barton nowhere discloses utilizing probe test packets to select network times but uses the "probe packet" mentioned in paragraph 86 to estimate a bandwidth between endpoints. Applicant further states that Barton use of test packets to test time slots that had already been allocated for use is disruptive.

Examiner respectfully disagrees with Applicant's conclusions. Applicant's suggestion that Barton in paragraph 86 uses probe packets to determine bandwidth between endpoints is an incomplete description. Barton in paragraph 86, in lines 9-15 clearly shows that bandwidth is really time interval associated with the endpoint to send or receive data. This is further supported by the discussion in paragraphs 31 and 91. Applicant should not assume a single definition for bandwidth as the general definition of bandwidth is any capacity to move information as defined on page 95 in Network Telecom Dictionary (16th edition, authored by Harry Newton) which in this case is time interval or time slot. In fact, Figure 4 shows the allocation record containing the time slot or interval 404 which is the bandwidth to be allocated or reserved.

Applicant position that Barton use of test packets to test time slots that had already been allocated for use sharply contradicts the teachings in Barton's paragraph 86. Barton's paragraph 86 simply suggests using probe packets prior to selecting the time slots or time intervals. Hence

none of the reasons provided by Applicant suggesting the combination of Klassen and Barton as improper are valid.

Applicant in the Remarks, in the last paragraph of page 10, with respect to claim 15, 7. argues that Barton fails to disclose synchronously transmitting a plurality of data packets during one or more time slots empirically determined to be associated with the reduced level of packet contention.

Examiner respectfully disagrees. In the last Office Action with respect to this limitation of claim 15, Examiner indicated how probe packets are used in Barton's paragraph 86 to select time slots or time intervals which Barton also refers to as bandwidth and is further supported by the discussion in paragraphs 31 and 91. The synchronous transmission aspect of the limitation is taught by Barton's paragraphs 88, 101 and 102 and Applicant appears to agree with the Examiner's interpretation of proper synchronization as taught by Barton as evidenced in lines 3-4 of the last paragraph of page 10 of the Remarks.

8. Applicant in the Remarks, on page 11, with respect to dependent claim 21 indicates Examiner's understanding of the limitation requiring transmitting the test packets at a data rate that exceeds an expected data rate for packets that are to be transmitted between two network endpoints on the network is erroneous. In the last Office Action, Examiner indicated that since the specification did not directly teach or mention "data rate" the Examiner is associating priority with data rate unless Applicant indicated direct support in the specification. Applicant now indicates paragraph 29 of the specification as originally filed provides the support for the dependent claim 21 and indicates data rate is different from priority.

Application/Control Number: 10/663,378 Page 7

Art Unit: 2616

Examiner respectfully disagrees. Paragraph 29 of the specification as originally filed does not talk about data rate. Paragraph 29 of the specification as originally filed only indicates changing test packet size (i.e. test packet size is changed from 80 bytes to 160 bytes). Even using the new understanding of data rate to mean changing test packet size, the primary reference, Klassen, in columns 2:9-15, 3:20-30, 7:6, and 10:17-40 and Figure 5 teaches the limitation in question based on the new understanding of data rate.

9. Applicant in the Remarks, on page 11, with respect to dependent claims 34 and 36 argues the passage cited from Klassen fail to teach TDM (Tim Division Multiplexing) data and the limitation TDM data converted into IP packets.

Examiner respectfully disagrees. All of the Examiner's citations from Klassen are pertinent to teaching the limitation in the dependent claims 34 and 36. Time Division Multiplexing (TDM) is a basic concept in telecommunication and any network carrying voice is based on the principles of TDM. Since Klassen's communication network support voice, video, and interactive data browsing use of TDM is a must to guarantee multiple access. Since the communication network supports TCP/IP, connection oriented and connectionless mode and IP ping packets are used as test packets, the TDM data has to be converted to IP packets in some parts of the communication network. All of the above explanation can be easily inferred by referring to the Examiner's citations from Klassen listed in the last Office Action (i.e. See Columns 1:52-54, 7:23-25, 8:34-35, 9:22, and 11:50).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to HABTE MERED whose telephone number is (571)272-6046.

The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Aung S. Moe can be reached on 571 272 7314. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

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Habte Mered

Examiner

Art Unit 2616

HM

03-30-2008

/Aung S. Moe/

Supervisory Patent Examiner, Art Unit 2616